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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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10-822-930

EXAMINER

ART UNIT	PAPER
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20050808

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Notice of Allowability	Application No.	Applicant(s)	
	10/822,930	LONG ET AL.	
	Examiner	Art Unit	
	Laura C. Hill	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to After Final Telephonic interview 8/4/05.
2. ☒ The allowed claim(s) is/are 1-53.
3. ☒ The drawings filed on 13 April 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>8 August 2005</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. Applicant's arguments, see pages 2-3 of Remarks, filed 28 June 2005, with respect to claims 1-2, 11, 17, 20 and 27 under 102(b) by Ahr et al. (US 5,997,520), with respect to claim 33 under 102(b) by Glaug et al. (US 5,649,914), with respect to claims 3-10, 12-13, 16, 22-26, 28-29 and 32 under 103(a) over Ahr et al. (US 5,997,520), with respect to claims 1-2 and 16-21 under 103(a) over Slavtcheff et al. (WO 01/56542), and with respect to claims 34-45 and 48-53 under 103(a) over Ahr et al. in view of Glaug et al. have been fully considered and are persuasive. The rejection of claims 1-53 has been withdrawn.
2. Applicant's request for reconsideration of the finality of the rejection of the last Office action (as noted in the telephonic interview on 4 August 2005) is persuasive and, therefore, the finality of that action is withdrawn.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

3. Ahr et al. (US 5,997,520) discloses an absorbent article having a liquid pervious top sheet 38, liquid impervious back sheet 42, absorbent core 44, and an expandable component 210 (column 4, line 50-column 5, line 1). Ahr et al. further discloses second activating materials/gas-generating system 400 as a means for the expanding component and a means for combining the materials to expand the spacer/inflatable envelope 210 to a greater second thickness T2, and yielding carbon dioxide (column 5, lines 14-18 and column 11, lines 32-38) as discussed in the Office Action dated 5 May 2005.

a. However, Ahr et al. does not contain a *urine-permeable* inflatable envelope as stated in previous Office Actions since the envelope 290 is a spunbond *hydrophobic* polypropylene nonwoven web (column 12, lines 39-45).

b. Ahr et al. requires the breakable packet 500 is broken by the user not upon being wetted with urination as required by Applicant's claim 1, but by pressure from squeezing the packet upon putting the diaper on the user (column 11, lines 15-17, column 5, lines 27-30).

c. The second activating materials 400 of Ahr et al. comprise a powdered acid/'surfactant' such as citric, tartaric, terphthalic, and salicylic acid that can be dissolved in water, therefore reducing surface tension as discussed in the Advisory Action dated 12 July 2005 (column 11, lines 38-50). Although the second activating materials of Ahr et al. are capable of being surfactants to form a carbon-dioxide generating system [Even though the powdered acids of Ahr et al. are not commonly used surfactants, citric and salicylic acid are used in US Pre-grant Pub 2004/0231977 and US Pre-grant Pub 2004/0102335], Ahr et al. does not disclose a *separate* surfactant and carbon-dioxide generating system.

4. Glaug et al. discloses a toilet training aid 24 that creates a distinct feeling during urination with a temperature change upon contact with an aqueous solution such as urine) as discussed in the Office Action dated 5 May 2005 (column 4, lines 24-27). Glaug et al. further discloses support layer/body side liner 58, wet sensation layer/absorbent core 56, and temperature change member 54 sandwiched between the

body side liner 58 (column 5, ll. 24-28, column 8, lines 39-41 and 50-54, column 10, lines 43-46, column 12, lines 36-40, figure 3).

a. The temperature change member 54 of Glaug et al. absorbs or releases heat during swelling and can include salt hydrates such as sodium acetate, sodium carbonate, sodium sulfate, etc (column 9, lines 42-56). However, Glaug et al. does not disclose or suggest a motivation to combine the carbon-dioxide generating system with a *separate* urine-permeable inflatable *envelope* comprising a surfactant.

5. Slavtcheff et al. discloses a sensory-imparting pleated water-permeable sachet walls with effervescent cleanser composition 12 placed within a pouch/inflatable envelope 10 to allow gaseous expansion and generates carbon dioxide when contacted with *water and an acid material* (page 6, lines 23-27, page 7, lines 16-17 and page 8, lines 19-21). Slavtcheff et al. further discloses the cosmetic article maintains a constant shape upon rubbing the article against the skin (page 2, line 28-page 3, line 2).

a. However, Slavtcheff et al. does not disclose a body side liner and an absorbent core layer or a motivation to combine the body side liner with an absorbent core of aforementioned references.

b. Furthermore, the effervescence/carbon-dioxide generating system of Slavtcheff is achieved when the pouch is contacted with water (*not urine*) and an acidic material.

c. In addition, Slavtcheff et al. does not contain a *separate surfactant*.

6. Whyte (US 3,881,491 and US 3,921,232) discloses a disposable diaper 40 with a self-inflating structure comprising embossed lamina/body side liner 23 (column 2, lines

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48-55), and an inflatable semi-permeable pillow/envelope 21 that forms a carbon dioxide-generating system upon being wetted with urine, and an absorbent core 31 (column 6, lines 40-46 and 55-63, figures 5 and 11). Whyte further discloses the body weight of the user becomes supported and absorbent capacity increases by inflated envelope 21 (column 6, lines 63-68).

a. However, Whyte does not disclose a *separate* surfactant or any motivation to combine a surfactant with the carbon-dioxide generating system.

b. Furthermore, Whyte does not disclose the inflatable envelope 21 located *between* the body side liner 23 and the absorbent core 31, but rather the envelope 21 is located on top of body side liner 23 (figure 7).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Hill whose telephone number is 571-272-7137. The examiner can normally be reached on Monday through Friday (off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura C. Hill
Examiner
Art Unit 3761

LCH



TATYANA ZALUKAEVA
PRIMARY EXAMINER

